Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): ~~A method for generating accounting data, the method~~ A method, comprising:

configuring a mechanism for accumulating information based on ~~identifying~~ an access control list including a plurality of access control list entries, ~~a subset~~ with one or more of the plurality of access control list entries identifying accounting requests; said configuring the mechanism including: associating accounting mechanisms with each of said ~~access control list entries in the subset~~ one or more of the plurality of access control list entries identifying accounting requests; and wherein at least one of the plurality of access control list entries identifies a deny operation and at least one of the plurality of access control list entries identifies a permit operation; and

~~identifying an item;~~ for each particular item of a plurality of items: identifying a particular accounting mechanism of said accounting mechanisms ~~one of said accounting mechanism~~ corresponding to the particular item based on matching the particular item with said one or more of the plurality of access control list entries; and in response, updating ~~said~~ the particular accounting mechanism corresponding to the particular item.

Claim 2 (currently amended): The method of claim 1, wherein ~~the~~ each item of the plurality of items corresponds to one or more fields of a received packet.

Claim 3 (currently amended): The method of claim 2, wherein ~~the~~ each item of the plurality of items further includes at least one autonomous system number, said at least one autonomous system number ~~identify~~ identifying a set of communication devices under a single administrative authority.

Claim 4 (currently amended): The method of claim 1, wherein at least one of said accounting mechanisms is associated with at least two different access control list entries in ~~the subset~~ said one or more of the plurality of access control list entries identifying accounting requests.

Claim 5 (original): A method for generating accounting data, the method comprising:
identifying a lookup value;
performing a lookup operation in an associative memory based on the lookup value to identify an associative memory result;
performing a lookup operation on an adjunct memory based on the associative memory result to identify a counter indication, wherein at least two entries within the adjunct memory include a same counter indication; and
updating one of a plurality of counters based on the counter indication.

Claim 6 (original): The method of claim 5, wherein said at least two entries are determined based on a corresponding specification in an access control list.

Claim 7 (currently amended): The method of claim 5, wherein the lookup value includes at least one autonomous system number, said at least one autonomous system number ~~identify~~ identifying a set of communication devices under a single administrative authority.

Claim 8 (currently amended): A method for generating accounting data, the method comprising:

identifying a lookup value, wherein the lookup value includes at least one autonomous system number, said at least one autonomous system number ~~identify~~ identifying a set of communication devices under a single administrative authority;

performing a lookup operation in an associative memory based on the lookup value to identify an associative memory result;

performing a lookup operation on an adjunct memory based on the associative memory result to identify a counter indication; and

updating one of a plurality of counters based on the counter indication.

Claim 9 (original): The method of claim 8, wherein said at least two entries are determined based on a corresponding specification in an access control list.

Claim 10 (original): An apparatus for generating accounting data, the apparatus comprising:

a lookup word generation mechanism for identifying a lookup value;

an associative memory for generating an associative memory result based on the lookup value;

an adjunct memory for generating a counter indication based on the associative memory result, at least two entries of the adjunct memory configured to generate a same counter indication value; and

a plurality of counters for maintaining counts and for updating one of the plurality of counters based on the counter indication.

Claim 11 (original): The apparatus of claim 10, wherein said at least two entries are determined based on a corresponding specification in an access control list.

Claim 12 (currently amended): The apparatus of claim 10, wherein the lookup word ~~generate~~ generated identifies at least one autonomous system number, said at least one autonomous system number ~~identify~~ identifying a set of communication devices under a single administrative authority; and wherein the lookup word includes said at least one autonomous system number.

Claims 13-15 (canceled)

Claim 16 (original): An apparatus for generating accounting data, the apparatus comprising:

means for identifying a lookup value;

means for performing a lookup operation in an associative memory based on the lookup value to identify an associative memory result;

means for performing a lookup operation on an adjunct memory based on the associative memory result to identify a counter indication, wherein at least two entries within the adjunct memory include a same counter indication; and

means for updating one of a plurality of counters based on the counter indication.

Claim 17 (original): The apparatus of claim 16, wherein said at least two entries are determined based on a corresponding specification in an access control list.

Claim 18 (currently amended): The apparatus of claim 16, wherein the lookup value includes at least one autonomous system number, said at least one autonomous system number ~~identify~~ identifying a set of communication devices under a single administrative authority.

Claim 19-20 (canceled)

Claim 21 (new): An apparatus, comprising:

one or more processors and memory, wherein the memory stores one or more instructions that, when executed by said one or more processors, perform operations comprising: configuring a mechanism for accumulating information based on an access control list including a plurality of access control list entries, with one or more of the plurality of access control list entries identifying accounting requests; said configuring the mechanism including: associating accounting mechanisms with each of said one or more of the plurality of access control list entries identifying accounting requests; and wherein at least one of the plurality of access control list entries identifies a deny operation and at least one of the plurality of access control list entries identifies a permit operation; and

means for, for each particular item of a plurality of items: identifying and updating a particular accounting mechanism of said accounting mechanisms corresponding to the particular item based on said one or more of the plurality of access control list entries.

Claim 22 (new): The apparatus of claim 21, wherein each item of the plurality of items corresponds to one or more fields of a received packet.

Claim 23 (new): The method of claim 22, wherein each item of the plurality of items further includes at least one autonomous system number, said at least one autonomous system number identifying a set of communication devices under a single administrative authority.

Claim 24 (new): The method of claim 21, wherein at least one of said accounting mechanisms is associated with at least two different access control list entries in said one or more of the plurality of access control list entries identifying accounting requests.

Claim 25 (new): An apparatus, comprising:

means for configuring a mechanism for accumulating information based on an access control list including a plurality of access control list entries, with one or more of the plurality of access control list entries identifying accounting requests; said means for configuring the mechanism including: means for associating accounting mechanisms with each of said one or more of the plurality of access control list entries identifying accounting requests; and wherein at least one of the plurality of access control list entries identifies a deny operation and at least one of the plurality of access control list entries identifies a permit operation; and

means for, for each particular item of a plurality of items: identifying and updating a particular accounting mechanism of said accounting mechanisms corresponding to the particular item based on said one or more of the plurality of access control list entries.